SCIENCE IN CHINA

(SCIENTIA SINICA)

Series B

SUBJECT INDEX TO VOLUME 34 (1991)

Chemistry

A Spectroscopic Study on Black Soap Films ..... *JIANG Yuan* et al. (1)

The Unified Form of Retention Equation of Chromatography ..... *DAI Chao-zheng* (13)

Time-resolved Fluorescence Study of Triple Exciplex Formed in the System of Poly(2-Vinyl) Naphthalene and Terephthalic Dimethylester ..... *ZHANG Li-min* et al. (26)

Electron Paramagnetic Resonance Studies of Single Crystal Sodium Hexamolybdochromate (III) $Cr^{3+}/Na_3(AlMo_6O_{24}H_6)\cdot 8H_2O$ ..... *YOU Xiao-zeng* et al. (129)

Photophysical Studies on Organic Compounds

—— Time-resolved Transient Absorption Spectra Studies on Triphenylamine in Various Solvents ..... *CHEN Feng-qi* et al. (135)

XPS-Investigation of Intramolecular Charge Transfer in Polynitro-Compounds

—— On the Electronic Structures of Nitroderivatives of Benzofuroxans ..... *WANG Jian-qi* et al. (141)

Epitaxial Crystallization of HDPE on iPP in HDPE/iPP Blends ..... *SHEN Yu* et al. (152)

The ESR Study of Some Dicyclopentadienyl Titanium Halide Complexes ..... *BAI Ling-jun* et al. (257)

Synthesis, Structure and Magnetism of μ-Oxamido Binuclear Copper(II) Complexes ..... *ZHANG Zhi-yong* et al. (265)

Studies on the Stereoselectivity and Substituted Groups of (+)-Camphor Derivatives ..... *GUO Peng* et al. (385)

Inelastic Scattering Formulation of Quantum Reactive Scattering ..... *DENG Cong-hao* et al. (394)

Synthesis and Crystal Structure of Heteropoly Molybdosilicic Lanthanide $K_{10}H_3[Pr(SiMo_{11}O_{39})_2]\cdot 18H_2O$ ..... *SHAN Yong-kui* et al. (513)

Research on Powdery Corrosion of the Serials Bells From Cai Hou Tomb ..... *WANG Chang-sui* et al. (522)

Mechanical Model for Two-Phase Polymer Blend Systems With the Characteristics of Phase Inversion ..... *CHEN Da-jun* et al. (532)

Theoretical Study of Reaction Dynamics of $H_2 \rightleftharpoons H+H$ on Lithium(100) Surface ..... *WANG Ze-xin* et al. (538)

Quantitative Explanation on Structure-Carcinogenic Activity Relationship of Aromatic Amines by Di-Region Theory ..... *DAI Qian-huan* et al. (547)

National Standard of Heat Capacity Measurement of Solids in the Range of 4.2—90 K

—— An Automated Adiabatic Calorimeter From 25 to 90 K and Molar Heat Capacities of α-Alumina ……*TAN Zhi-cheng* et al. (560)
The Immobilization of Aminoacylase and the Resolution of D, L-Phenylalanine ……*HAN Ji-hong* et al. (641)
Photooxygenation of Caffeine Sensitized by Hypocrellin B ……*WANG Zhi-jun* et al. (651)
Photophysics Studies of Organic Compounds (XII)
—— The Investigation of the Fluorescence Spectra of N-Salicylidene-*p*-(N, N-Dimethylamino)-Aniline ……*WANG Feng-qi* et al. (659)
Metal Clusters Synthesized by Solid State Reaction
—— Preparation and Crystal Structure of Two Mixed Metal Clusters, $Ni_2Nb_2Te_4$ (I) and $Ni_2Ta_2Te_4$ (II) …… *HUANG Jin-ling* et al. (666)
Thermodynamic Analysis of the Enantiomer Resolution of TFA-Ala-OMe, TFA-Ala-Ala-OMe, and TFA-Ala-Ala-Ala-OMe by Gas Chromatography on Chirasil-Val ……*LIN Bing-cheng* et al. (769)
A New Synthetic Route to α-Aryl Propionic Acid and a Quantitative Study of the Photo-$S_{RN}1$ Reaction of Aryl Halides With Canbanion From Alkyl Nitrile ……*WU Bi-qi* et al. (777)
Studies on Bio-Antioxidants
—— Prooxidation of Vitamin E on the Autoxidation of Linoleic Acid in Sodium Dodecyl Sulfate Micelles ……*LIU Zhong-li* et al. (787)
Relationships Between X—H Stretching Overtone Frequencies and Bond Lengths/Bond Angles ……*WANG Yi-fei* et al. (796)
Synthesis, Characterization of Imidazolate-bridged Heteropolynuclear Complexes and Their Activity in Dismutation of O_2 ……*TANG Wen-xia* et al. (897)
The Study of Many-Body Theory of Valence-Electron Structure of Metal Complex ……*SHEN Yi-min* et al. (1025)
Single $Mo_nFe_{4-n}S_4$ (n=0, 1, 2) Cubane-like Clusters: Preparation From Combination of Dinuclear Complexes and the Structure of $[Mo_2Fe_2S_4(C_4H_8dtc)_6] \cdot 3.5C_2H_2Cl_4$……*LIU Qiu-tian* et al. (1036)
Synthesis and Structure of μ-O-Bis-[(Permethyl Polysilandiyl) Dicyclopentadienyl Chlorozirconium] ……*ZHOU Xiu-zhong* et al. (1047)
A Study on the Structural Effect of Double-bridged Conjugative Systems ……*JIANG Ming-qian* et al. (1153)
A Study on the Chemical Mechanism for Powder Corrosion of Bronze Alloy ……*FAN Chong-zheng* et al. (1164)
High Resolution Spectroscopic Study of the Local Mode Vibrational States of Silane ……*ZHU Qing-shi* (1174)
Photochemistry of Hypocrellin A(VII)
—— Photo-induced One-Electron Reduction of Hypocrellin Pigments ……*AN Jing-yi* et al. (1281)
Crystallographic Structure and Magnetic Properties of $R_2Fe_{17}N_{24}$ ……*YANG Ying-chang* et al. (1290)
Endor and ESR Studies of Radicals Formed in Friedel-Crafts Reactions ……*SANG Hong* et al. (1296)
Nitrosyl Complexes
—— Synthesis, Characterization and Crystal Structures of $(\eta^5\text{-}C_5H_5)M(CO)_2NO$ and $(\eta^5\text{-}C_5H_5)M(\mu_3\text{-}NH)(\mu_2\text{-}NO)(\mu_2\text{-}CO)Fe_2(CO)_6$ (M=Mo or W)……*YANG Shi-yan* et al. (1304)

Structure and Properties of P(MMA-MAA)/PEO Intermacromolecular Complex Formed Through Hydrogen Bonding ····· *WANG Qi* et al. (1409)
Theoretical Study on the 1,4-Cycloaddition Reaction Between Singlet Oxygen ($^1O_2$) and Imidazole ····· *DING Yan-bo* (1418)
The Effects of Molecular Structure on Parameters *a*, *b* and *c* in Retention Equation and Prediction of Capacity Factors in RP-HPLC ····· *LU Pei-zhang* et al. (1425)

Life Sciences

The Antisense C-Ha-ras Oligodeoxynucleotides Inhibit the Proliferation of the Gastrocarcinoma-DNA-Transformed Rat 3-3 Cells and Reduce the P21 Expression of the Cells ····· *XU Yi* et al. (35)
Transfer Mechanism of Quinine Drug Across the Oil/Water (O/W) Interface ····· *XIAO Jun* et al. (42)
Studies on Introduction of Foreign Genes Into Cultured Cells of *Oryza sativa* Indica Using *Agrobacterium* Ti Plasmid System ····· *LI Bao-jian* et al. (54)
The Biological Function of Rabbit Blastocyst Peptides (RBPs) ····· *CAO Yong-qing* et al. (64)
Studies on Heterologous Expression of *Rhizobium meliloti nifA* Gene and Oxygen Sensitivity of Its Product ····· *WANG Shui-ping* et al. (71)
Effects of Changes in Pattern of LHRH Pulse on LH Secretion by Perfused Anterior Pituitary Cells of Male Rats ····· *QU Zhi-chao* et al. (161)
The Projection Linkage Between the Spinal Dorsal Horn Neurons and Both the Solitary Tract and Dorsal Column Nuclei ····· *LÜ Guo-wei* et al. (171)
Effects of L-Glutamine, Glutaminase and Glutamine Synthetase of CAP Threshold of Cochlear Nerve of Guinea Pig ····· *SUN Yu-wen* (184)
Studies on DNA Sequence Specific Binding Proteins for 5′ Flanking Upstream Region of CPSI Gene ····· *HONG Yan* et al. (194)
Synthesis and Bioactivities of New LHRH Antagonists Containing Novel Unnatural Amino Acids at Position Five ····· *LIU Ke-liang* et al. (201)
B Subunit of Cholera Toxin Produced in *Escherichia coli* ····· *MA Qing-jun* et al. (274)
Ultrastructure of the Nucleolus and Replication Sites of Ribosomal DNA in *Allium cepa* ····· *HAO Shui* et al. (281)
A New Spiroplasma From the Surface of Plant Flower in China ····· *GUO Yong-hong* et al. (290)
Arginyl-tRNA Synthetase From *Escherichia coli* Affinity Labeling With 3′-Oxidized $tRNA^{Arg}$ ····· *CHENG Xiao-dong* et al. (297)
The Crystal Structure of Silver Carp Insulin at Medium Resolution ····· *LI Zhi-wei* et al. (306)
The Effects of Perfusion of Lateral Ventricle With $CaCl_2$ on the Febrile Response and cAMP Content in Plasma and Cerebrospinal Fluid During LP-induced Fever ····· *ZHANG Yi* et al. (317)
Two New Formulas for Triangulation Number *T* ····· *WANG Ji-ke* (403)
Study on Induction of Differentiation of a Human Megakaryoblastic Leukemia Cell Line (HIMeg) by 1,25-Dihydroxyvitamin D_3 ····· *CHENG Tao* et al. (412)

Production and Cytogenetic Study of Intergeneric Hybrids Between *Triticum aestivum* and *Agropyron desertorum* ····· *LI Li-hui* et al. (421)
Transposition Inhibition of Tn5 in *Rhizobium leguminosarum* ····· *WANG Chang-lin* (429)
Direct Somatic Embryogenesis and Plant Regeneration From Protoplast-derived Cells of Wheat (*Triticum aestivum* L.) ····· *GUO Guang-qin* et al. (438)
Age-dependent Logistic Regression Model and Its Application ····· *LIU Yun-yuan* (446)
Specific Protein Occurrence Related With Photoperiodic Flower Induction in the Cotyledons of *Pharbitis nil* CV. Violet ····· *LI Li-wu* et al. (570)
Frequency Conversion Property and Dynamic Process in Songs of *Mingming* Cicada (*Oncotympana maculaticollis* Motsch) ····· *JIANG Jin-chang* et al. (576)
Culture and Regeneration of Poplar Mesophyll Protoplasts ····· *WANG Shan-ping* et al. (587)
Location of 43 kD Mosquito-larvicidal Toxin Gene of Highly Toxic *Bacillus sphaericus* 10 ····· *LIU Yang* et al. (593)
Role of Na^+-Ca^{2+} Exchange System in the Pathogenesis of Myocardial Ischemia-Reperfusion Damage ····· *LI Zhao-ping* et al. (599)
A New Silent Mutation Found in the Chinese PAH Locus and Its Role in the Prenatal Diagnosis of Phenylketonuria ····· *HUANG Shu-zhen* et al. (606)
Dark Adaptation of Horizontal Cells in the Teleost Fish Retina ····· *YANG Xiong-li* et al. (611)
O^6-Methylguanine-DNA Methyltransferase and Human Cancer Chemotherapy ····· *ZHANG Yang-pei* et al. (675)
Potentiated Effect of Vagal Stimulation and Hormonal Agents on Pancreatic Exocrine Secretion in Dogs ····· *MEI Mao-hua* (683)
Chemical Modification of Sulfhydryl Groups of *E. coli* Leucyl-tRNA Synthetase and Sequencing of [^{14}C] Nem-labeled Peptides ····· *MIAO Feng* et al. (691)
Effect of Pre-Flight Treatment With Constant Magnetic Field on Development of *Artemia* Eggs Retrieved From Chinese Satellite "8885" ····· *XING Guo-ren* et al. (699)
Studies on Steroidal Plant-Growth Regulators (XVII)
—— A New Synthesis of Homobrassinolide and (22S, 23S)-22, 23-EPI-Homobrassinolide ····· *ZHU Jia-ling* et al. (706)
An Efficient Site-directed Mutagenesis Using Polymerase Chain Reaction ····· *YANG Xiang-jiao* et al. (712)
Expression of Human Interferon-α cDNA in Transformed Tobacco Plant ····· *CHEN Ju* et al. (804)
Correlation of Annual Change of Luteinizing Hormone-releasing Hormone (LH-RH) With Gonadal Development in Amphioxus ····· *FANG Yong-qiang* et al. (814)
Cytologic and Embryologic Studies on Apomicts Discovered From Male Sterility Line C1001 in Rice (*Oryza sativa* L.) ····· *WU Bo-ji* et al. (823)
Inhibitory Property Characterization and Reactive Site Exploration of the Arrowhead Proteinase Inhibitor ····· *YANG Hui-ling* et al. (832)

Internalization of Gap Junctions Between Neuron and Glial Cell and Formation of Annular Lamellar Bodies in Chinese Leech *Whitmania pigra* ..... *ZHU Li-xia* et al. (840)

Proton Nuclear Magnetic Resonance and Electron Paramagnetic Resonance Investigation of α-α Cross-linked Fe-Co Hybrid Hemoglobins ..... *ZHOU Yu-xiang* et al. (850)

Effect of a 30 kD Protein From Tectal Extract of Rat on Cultured Retinal Neuron ..... *ZHOU Ming-hua* et al. (908)

Properties of Chicken Liver Phosphofructokinase-2 ..... *LI Lin* et al. (916)

Introduction of Foreign Genes Into the Seed Embryo Cells of Rice by Electroinjection and the Regeneration of Transgenic Rice Plants ..... *LI Bao-jian* et al. (923)

Transformation of *Lotus Corniculatus* L. Mediated by *Agrobacterium Tumefaciens* ..... *YU Jian-ping* et al. (932)

Study on Reproductive Endocrinology of Human Placenta
—— Culture of Highly Purified Cytotrophoblast Cell in Serum-free Hormone Supplemented Medium ..... *LI Rong-hao* et al. (938)

Studies on Preparation of Inactivated Vaccines From Cell Cultures of Mink Enteritis Virus (MEV) and Their Immunity ..... *ZHANG De-li* (947)

Development of Common Wheat Germplasm Resistant to Barley Yellow Dwarf Virus by Biotechnology ..... *XIN Zhi-yong* et al. (1055)

DNA Synthesis Inhibition of Nitroxide Radicals on Leukemia Cells ..... *LIU Li-sheng* et al. (1063)

The Primary Structure of Arrowhead Proteinase Inhibitor ..... *YANG Hui-ling* et al. (1070)

Recognition Sequence Specificity of Signal Peptidase I and the Role of Signal Peptide in Secretion of Protein in *Bacillus Subtilis* ..... *ZHOU Yi* et al. (1082)

Study on Reproductive Endocrinology of Human Placenta (II)
—— Hormone Secreting Activity of Cytotrophoblast Cells ..... *ZHUANG Lin-zhi* et al. (1092)

Study on Reproductive Endocrinology of Human Placenta (III)
—— Hormonal Regulation of Progesterone Production by Trophoblast Tissue of First Trimester ..... *SHI Cong-zhu* et al. (1098)

Studies on the Origin of B Chromosomes in Rey ..... *ZHENG Yong-ren* et al. (1186)

Synthesis and Determination of the Biological Activities of Yeast Alanine tRNA Analogues ..... *LIU Jian-hua* et al. (1198)

Study on Mechanism of Ethylene Control of Sex Differentiation in *Lagenaria siceraria* ..... *YING Zhen-tu* et al. (1205)

A Comparative Study on Involvement of tPA Activity in Ovulation Induced by hCG and GnRH Agonist in Hypophysectomized Rats ..... *LIU Yi-xun* et al. (1215)

Transthyretin (Prealbumin) Gene in Human Primary Hepatic Cancer ..... *GU Jian-ren* et al. (1312)

Immunophenotyping of 515 Cases of Acute Lymphoblastic Leukemia in China ……*BAI Yan* et al. (1319)
Virus Resistance of Transgenic Tobacco Plants Expressing Tobacco Mosaic Virus Coat Protein Gene ……*TIAN Ying-chuan* et al. (1329)
Meiotic Chromosome Behavior in Female Intersexes of Artificial Triploid Transparent Colored Crucian Carp ……*GUI Jian-fang* et al. (1341)
Double-edged Limit of Total Fertility Rates……*SONG Jian* et al. (1354)
Site-specific Deletion of the N-terminal Segments From EcoRI Endonuclease Using the Polymerace Chain Reaction ……*YANG Xiang-jiao* et al. (1436)
Infection of Ri T-DNA-transformed Roots by *Plasmodiophora brassicae* in Brassica Crops …… ……*HE Yu-ke* (1444)
Paradoxical Effect of a GnRH Agonist on Steroidogenesis in Cultured Monkey Granulosa Cells…… ……*LIU Yi-xun* et al. (1452)
Purification of Cd-binding Protein From Maize Roots by Reverse-Phase High-Performance Liquid Chromatography ……*HE Du-xiu* et al. (1461)
In vitro Transformation of Rat Esophageal Epithelial Cells by Fusarin C ……*LU Fu-xiong* et al. (1469)
Synthesis and Secretion of Human Atrial Natriuretic Peptide in *Saccharomyces cerevisiae* …… ……*QIN Ning* et al. (1478)
Inhibited Neoplastic Phenotype by the c-Ha-*ras* Antisense RNA……*LU Gui-rong* et al. (1485)

Earth Sciences

The Parameter Kernels for the Linear Inversion of the Free Oscillation of the Earth (I) …… ……*FANG Jun* (78)
The Parameter Kernels for the Linear Inversion of the Free Oscillation of the Earth (II) …… ……*FANG Jun* (86)
On the Formation of the Antarctic Ozone Hole and Its Trend Predictions …… ……*WEI Ding-wen* (95)
Energy Transfer Process During Rock Deformation …… ……*ZHENG Zai-sheng* (104)
Sr-O Isotope System of Some Granitoids in China …… ……*YU Jin-sheng* et al. (118)
Isotopic Geochemistry of Fossil Fuels in China ……*XU Yong-chang* et al. (209)
Analysis and Modelling of Tropical Cyclone Motion (I)
—— The Axiasymmetric Structure and the Sudden Change of Tracks …… ……*LI Tian-ming* et al. (222)
Annual Variations of E −P Cross Section and Tropospheric Westerly Acceleration …… ……*WU Guo-xiong* et al. (234)
C_{30} — C_{32} Lanostanes —— A Novel Series of Tetracyclic Triterpenoid Hydrocarbons Identified in Chinese Tertiary Lacustrine Sediments…… ……*CHEN Jun-hong* et al. (249)
Oxygen Isotope Compositions of Seawaters in the Huanghai (Yellow) Sea and the Bohai Sea …… ……*WU Shi-ying* (327)
The Study on Features of Paleoclimatic Variation of Dry and Cold Areas (II)
—— Preliminary Study on Fluctuating Model of Paleoclimate of Qarhan Salt Lake Region in Qaidam Basin ……*HUANG Qi* et al. (338)
Microwave Remote Sensing of Atmospheric Property and Weather Process ……*ZHAO Bo-lin* et al. (352)

Geochemistry of Bicyclic Alkanes in Sediments, Coal and Crude Oils ..... *LUO Bin-jie* et al. (363)
The Global Biostratigraphical Correlation of the Meishucunian Stage and the Precambrian-Cambrian Boundary ..... *LUO Hui-lin* et al. (377)
Characteristics of 30—60 Day Oscillation of General Circulation in Northern Hemisphere ..... *LI Chong-yin* et al. (457)
Northern Hemispheric Summer Climatic Jump in the 1960s (II)
—— Sea Level Pressure and 500 hPa Height ..... *YAN Zhong-wei* et al. (469)
A Novel Tricyclic Terpane Biomarker Series in the Upper Proterozoic Bituminous Sandstone, Eastern Yanshan Region ..... *WANG Tie-guan* (479)
Preliminary Research on Clay Minerals in Salt Lake Sediments of China and Its Significance ..... *XU Chang* (490)
Comparative Research on Environmental Evolution Between the Region of Antarctic Great Wall Station and China ..... *ZHAO Jun-lin* (502)
Geochronology of Wanyangshan-Zhuguangshan Granitoid Batholith: Implication for the Crust Development ..... *LI Xian-hua* (620)
The Lateral Inhomogeneity in Yunnan Province, China ..... *CHEN Pei-shan* et al. (630)
Numerical Simulation of Bénard Convection in a Closed Rectangle (I)
—— Two-dimensional Case ..... *YAN Shuo-wen* et al. (719)
$\delta^{18}O$ Contours and Ancient Fossil Hydrothermal System of Miarolitic Alkaline Granite, Nianzishan, Heilongjiang ..... *LI Pei-zhong* et al. (732)
Raman Spectroscopy of C, H, L and LL Chondrites and Its Significance in Exploring the Formation Environments of Meteorites and Their Taxonomy ..... *LI Zhao-hui* et al. (741)
Reconstruction of Temperature Series of North China From 1380s to 1980s ..... *WANG Shao-wu* (751)
Climatic Change Since Little Ice Age Recorded by Dunde Ice Cap ..... *YAO Tan-dong* et al. (760)
Geoenvironmental Characters of Yellow (Huanghe) River Suspended Load ..... *HONG Ye-tang* et al. (859)
Numerical Simulation of Bénard Convection in a Closed Rectangle (II)
—— Three-dimensional Case ..... *YANG Shuo-wen* et al. (871)
A New Cumulus Parameterization Scheme and Its Application to Precipitation Numerical Prediction ..... *XU Xi-hua* et al. (883)
Study on the Formational Mechanism of the Northern Yellow (Huanghai) Sea Cold Water Mass (I)
—— Solution of the Model ..... *MIAO Jing-bang* et al. (963)
The Precursor of Instability for Nonlinear Systems and Its Application to Earthquake Prediction ..... *YIN Xiang-chu* et al. (977)
Stratigraphic and Geochronologic Analyses of the Quaternary Deposits in the Three-Lake Region of Qaidam Basin ..... *LIU Ze-chun* et al. (987)
Paleomonsoons of China Over the Last 130,000 Years
—— Paleomonsoon Records ..... *AN Zhi-sheng* et al. (1007)
Paleomonsoons of China Over the Last 130,000 Years
—— Paleomonsoon Variation ..... *AN Zhi-sheng* et al. (1016)

A New Family of Neuroptera (Insecta) From the Late Mesozoic of Shandong, China ..... *ZHANG Jun-feng* (1105)
Natural Gas of New Genetic Type —— Bio-, thermo-catalytic Transitional Zone Gas ..... *XU Yong-chang* et al. (1113)
Measurement of Spontaneous Fission Decay Constant (λ_f) of ^{238}U ..... *LIU Shun-sheng* et al. (1120)
A Parameterized Study on the Local Similarity Theory in the Stable Boundary Layer Model ..... *LI Xing-sheng* et al. (1131)
An Enormous Thrust Nappe and Extensional Metamorphic Core Complex Newly Discovered in Sino-Mongolian Boundary Area ..... *ZHENG Ya-dong* et al. (1145)
A New Model of Frost Heave Prediction for Clayey Soils ..... *CHEN Xiao-bai* et al. (1225)
A Study on the Reconstruction of the Eighteenth Century Meiyu (Plum Rains) Activity of Lower Changjiang (Yangtze) Region of China ..... *ZHANG De-er* et al. (1237)
Inversion of a Nonlinear Dynamical Model From the Observation ..... *HUANG Jian-ping* et al. (1246)
Transitional Field Behaviour for the Matuyama-Brunhes ..... *ZHU Ri-xiang* et al. (1252)
Simulation Modelling of the Impacts of Sea-Level Rise Since the Lateglacial Period on the Changjiang (Yangtze) River, China ..... *FANG Jin-qi* (1258)
Study on the Formational Mechanism of the Northern Yellow (Huanghai) Sea Cold Water Mass (II) —— Discussion on the Solution of the Model ..... *MIAO Jing-bang* et al. (1270)
Evaluating the Water Resource Impacts of Climatic Warming in Cold Alpine Regions by the Water Balance Model: Modeling the Urumqi River Basin ..... *LAI Zu-ming* et al. (1362)
Silurian-Devonian Coupling of the North China and Yangtze Plates: Evidence From the Geochemistry of Sedimentary Rocks ..... *GAO Shan* et al. (1372)
The Early Jinning Juvenile Continental Crust Transformation Type Granitoids From Southern Anhui Province, China ..... *XING Feng-ming* (1381)
Ichnofacies in Late Paleozoic Deep-water Slope Sediment of Junggar Basin and Its Environmental Analysis ..... *JIN Hui-juan* et al. (1396)
Chemical Species of Iridium and Other Trace Elements at K-T Boundary Clay Layer, Stevns Klint, Denmark, and Its Implication ..... *CHAI Zhi-fang* et al. (1492)
Formation Mechanism on Phase 5 and Phase 3 ..... *ZHANG Zhen-yu* et al. (1501)
A Study of the Formation of Ancient Channels on the North China Plain ..... *WU Chen* et al. (1510)
Nonlinear Stability Criteria for Motions of Multilayer Quasi-geostrophic Flow ..... *MU Mu* (1516)